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10/803,320	03/18/2004	Edward R. Rhoads	ITL.0308CIUS (P7989C)	5772

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EXAMINER
RAYYAN, SUSAN F

ART UNIT	PAPER NUMBER
2167	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/803,320	RHOADS ET AL.
	Examiner	Art Unit	
	Susan F. Rayyan	2167	.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March 2007*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19 and 31-50* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19, 31-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-19, 31-50 are pending.

Terminal Disclaimer

2.   The terminal disclaimer filed on April 30, 2007 disclaiming the terminal

portion of any patent granted on this application which would extend beyond the

expiration date of US Patent Number 6,741,978 has been reviewed and is

accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or
> composition of matter, or any new and useful improvement thereof, may obtain a patent
> therefor, subject to the conditions and requirements of this title.

the claimed invention is directed to non-statutory subject matter.

Claims 1-19, 31-50 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter.

MPEP 2106 IV.B.2. (b) A claim that requires one or more acts to be performed

defines a process. However, not all processes are statutory under 35 U.S.C.

101. Schrader, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed

computer-related process must either: (A) result in a physical transformation

outside the computer for which a practical application. is either disclosed in the

specification or would have been known to a skilled artisan, or (B) be limited to a

practical application.

Claims 1-18, 31-50 in view of the above cited MPEP sections, are not

statutory because they merely recite a number of computing steps without

producing any tangible result and/or being limited to a practical application.

Claim 1, recites "accessing a semiconductor memory storing compressed

data", and "locating said file data ...". The claim does not provide a tangible

result. A tangible result, for example, would display or report or output the located

file data to the user.

Claim 31, recites "receiving a request from a operating system for file

data", accessing a flash memory ...", and "locating said file data on said flash

memory using information stored in said flash memory". The claim does not

provide for an obvious tangible result such as outputting, displaying or reporting

the located file data to the user.

Claim 40, recites "a processor" and "a flash memory to store an operating

system, compressed file data ...". The claim does not provide an obvious

tangible result such as providing the located data to the user.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C.

102 that form the basis for the rejections under this section made in this Office

action:

> A person shall be entitled to a patent unless —
>
> (b) the invention was patented or described in a printed publicatbn in this or a foreign county or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 9, 10-15, 19, are rejected under 35 U.S.C. 102(b) as

being anticipated by US Patent Number 5,490,260 issued to William D.

Miller et al. ("Miller").

Regarding independent claim 1, Miller et al. anticipates the claimed invention of

accessing a semiconductor memory storing compressed file data and locating

file data on semiconductor memory using information stored on semiconductor

memory (See col. 3, lines 58- col. 4, lines 17, wherein Miller et al. teaches the

claimed limitation of locating the file on semiconductor memory with stored

addresses.)

Regarding claims 2, same as claim augments above and Miller et at. anticipates

he claimed invention of decompressing the compressed file data as described in

col. 4, lines 14-17.

Regarding claims 3, same as claim augments above and Miller et al.

anticipates   storing the data by CPU as described in col. 7, lines 58-61.

Therefore it is inherent that the decompressed data is formatted in format

compatible by the OS as claimed.

Regarding claims 4, same as claim augments above and Miller et al.

anticipates storing decompressed data in a buffer as described in

col. 9, lines 27-32.

Regarding claims 5, same as claim augments above and Miller et al.

anticipates forming a block of data of equal size as described in col. 3, lines 14-

18.

Regarding claims 6, same as claim augments above and   Miller et al.

anticipates forming a compressed block file of unequal size is described in col.

3, lines 27-45, wherein Miller et al. teaches the data blocks of various size to

store compressed data.

Regarding claims 9, same as claim augments above and   Miller et al.

anticipates operating system being executed by CPU as described in col. 6,

lines 55-58. It is inherent that operating system is accessed and since address

information maintained by operating system is stored in semiconductor

memory, it is inherent that operating system is stored in semiconductor

memory.

Regarding claim 10 , Miller et at. anticipates the claimed invention of accessing

a semiconductor memory storing compressed file data and locating file data on

semiconductor memory using information stored on semiconductor memory

(See col. 3, lines 58- col. 4, lines 17, wherein Miller et al. teaches the claimed

limitation of locating the file on semiconductor memory with stored addresses.)

Regarding claim 11, same as claim augments above and Miller et at. anticipates

the claimed invention of decompressing the compressed file data as described in

col. 4, lines 14-17.

Regarding claim 12,   same as claim augments above and Miller et al.

anticipates a format for storing the data by CPU as described in col. 7, lines 58-

61. Therefore it is inherent that the decompressed data is formatted in format

compatible by the OS as claimed.

Regarding claim 13, same as claim augments above and Miller et al.

anticipates the claimed invention of storing decompressed data in a

buffer as described in col. 9, lines 27-32.

Regarding claim 14, same as claim augments above and Miller et al.

anticipates the claimed invention of forming a block of data of equal size as

described in col. 3, lines 14-18.

Regarding claim 15, same as claim augments above and   Miller et al.

anticipates the claimed invention of forming a compressed block file of unequal

size is described in col. 3, lines 27-45, wherein Miller et al. teaches the data

blocks of various size to store compressed data.

Regarding claim 19, same as claim augments above and Miller et al.

anticipates the operating system being executed by CPU as described in col. 6,

lines 55-58. It is inherent that operating system is accessed and since address

information maintained by operating system is stored in semiconductor

memory, it is inherent that operating system is stored in semiconductor

memory.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the

basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 8, 16-18,31-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Number 5,490,260 issued to William D. Miller et al. (" Miller") as applied to claims 1,5-6,10,14 above and further in view of US Patent Number 5, 337, 275 issued to Ricahrd P. Garner ("Garner").

Regarding claims 7, 8, 16-18 Miller et al. teaches the claimed invention as discussed above and Miller et al. does not specifically teach a header providing location information and length of the blocks. Garner does teach this limitation. Specifically Garner teaches the header as shown in fig 2, with a pointer to locate the file (col. 6, lines 1-5) and length (starting and ending points which determine the size of the sector at col. 7, lines 6-9). It also teaches the number of entries as described in col. 6, line 6. (revision number) Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to include a header and information on length in the method of Miller et al. because it allows condition of the sectors to be transferred thus aiding in determining error in data transfer.

Regarding independent claim 31, Miller et at. teaches the claimed invention of receiving a request from an operating system for file data, accessing a ... memory storing compressed file data and locating file data on ... memory using information stored on ... memory (See col. 3, lines 58- col. 4, lines 17,

wherein Miller et al. teaches the claimed limitation of locating the file on

semiconductor memory with stored addresses.)

Miller does not explicitly teach flash memory. Garner does teach flash

memory as described in col. 1, lines 10-16. Therefore it would have been

obvious for one of ordinary skill in the art at the time the invention was made to

implement the flash memory in the method of Miller et al. because it provides

rugged, light weight memory option which occupies very little space.

Regarding claim 32, same as claim arguments above and Miller teaches

further including decompressing said compressed file data as described in col. 4,

lines 14-17.

Regarding claim 33 same as claim arguments above and Miller teaches

including using a device driver to format the decompressed data in a format

compatible with a file system utilized by said operating system as described in

col. 7, lines 58-61. Therefore it is inherent that the decompressed data is

formatted in format compatible by the OS as claimed.

Regarding claim 34 same as claim arguments above and Miller

teaches including storing the decompressed data in a buffer for use

by a file system driver as described in col. 9, lines 27-32.

Regarding claim 35 same as claim arguments above and Miller teaches

including forming a file system image of blocks of data of substantially equal

size as described in col. 3, lines 14-18.

Regarding claim 36 same as claim arguments above and Miller teaches

including compressing each of said blocks to form a compressed file system

image formed of blocks of unequal size is described in col. 3, lines 27-45,

wherein Miller et al. teaches the data blocks of various size to store

compressed data.

Regarding claim 37 same as claim arguments above and Garner teaches

including affixing a header to said file system image which provides information

about how to locate each block (the header as shown in fig 2, with a pointer to

locate the file, col. 6, lines 1-5).

Regarding claim 38 same as claim arguments above and Garner teaches

including providing in said header information about the number of entries in

an allocation table and providing in said allocation table information about the

length of each of said compressed blocks in said file system image (starting

and ending points which determine the size of the sector at col. 7, lines 6-9).

It also teaches the number of entries as described in col. 6, line 6. (revision

number).

Regarding claim 39 same as claim arguments above and Miller teaches

including accessing an operating system stored in said semiconductor

memory as described in col. 6, lines 55-58. It is inherent that operating system is

accessed and since address information maintained by operating system is

stored in memory, It is inherent that operating system is stored in

semiconductor memory.

Regarding independent claim 40, Miller teaches a processor, a flash memory

coupled to said processor, said flash memory to store an operating system,

compressed file data, and information for use in locating said file data in said

flash memory (See col. 3, lines 58- col. 4, lines 17, wherein Miller et al. teaches

the claimed limitation of locating the file on semiconductor memory with stored

addresses.)

Miller does not explicitly teach flash memory. Garner does teach flash

memory as described in col. 1, lines 10-16 because it provides rugged, light

weight memory option which occupies very little space. Therefore it would have

been obvious for a person with ordinary skill in the art at the time the invention

was made to implement the flash memory in the method of Miller et al. because it

provides rugged, light weight memory option which occupies very little space.

Claims 41-42, 44-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. further in view of Garner , as applied to claim 40 above, and further in view of US Patent Number 6,407,949 issued to Sanjay Jha et al ("Jha").

Regarding claim 41, same as claim arguments above and Miller and Garner do not explicitly teach wherein the system is a cellular telephone. Jha does teach this limitation at column 1, line 31 to improve access time and reduce power consumption. It would have been obvious to one of ordinary skill in the at the time of the invention to modify the system to include a cellular telephone system with flash memory to improve access time and reduce power consumption (Abstract).

Regarding claim 42, Miller et al. teaches the data stored in a compressed format (See col. 3, lines 58- col. 4, lines 17). It is inherent that it includes basic I/O data.

Regarding claims 44,45 Miller et al. teaches a format for storing the data by CPU as described in col. 7, lines 58-61. Therefore it is inherent that the decompressed data is formatted in format compatible by the OS as claimed.

Regarding claim 46 same as claim arguments above and Garner teaches: wherein said flash memory stores an allocation table to indicate the length of

entries stored in said flash memory and the number of entries in said

allocation table (fig 2, a pointer to locate the file ,col. 6, lines 1-5) and starting

and ending points which determine the size of the sector (col. 7, lines 6-9). It

also teaches the number of entries as described in col. 6, line 6. (revision

number)

Regarding claim 47, same as claim arguments above and Miller et al. teaches the

claimed invention of wherein said file data stored in compressed form on ... memory

is formed into compressed blocks of unequal length is described in col. 3, lines 27-

45, wherein Miller et al. teaches the data blocks of various size to store

compressed data.

Regarding claim 48, same as claim arguments above and Garner teaches

including data for more than one file system stored on said flash memory (the

flash memory as described in col. 1, lines 10-16).

Regarding claim 49, Miller et al. teach the loader and kernel stored on

memory as described in col. 4, lines 10-11.

Regarding claim 50 Miller et al. teaches the claimed invention as described

above with respect to claims 40- 41. However, Miller et al. does not teach a

network connection to download additional data. It is a common knowledge in

the art to implement a network connection to download data from the remote

site. Therefore it would have been obvious for a person with ordinary skill in

the art at the time the invention was made to implement network connection to

the system of Miller et al. because it aids in retrieving the data and

downloading the data from remote location.

Allowable Subject Matter

6.   Claim 43 is objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Regarding claim 43, the cited prior art fails to teach alone or in a combination the

claimed invention of stored on said flash memory, a primary operating system

and backup operating system for use when primary operating system fails to

needs updating as claimed along with other features. Therefore the invention as

claimed will be allowable if re-written in an independent form.

Response to Arguments

7.   Applicant's arguments filed November 20, 2006 have been fully

considered but they are not persuasive. Applicant refers to the Final Office

Action. Examiner assumes the Applicant is referring to the First Office Action

mailed on September 15, 2006.

Regarding Applicant's arguments claims 1-19, 31-50 are directed to

Statutory Subject Matter as "the result is that the file data on a semiconductor

memory can be located. Thus, semiconductor memories can be used to store

compressed file data as actually recited in the claim and the compressed file data

can be located, even though it is compressed, using information stored in that

memory", Examiner respectfully disagrees. The claims must provide a tangible

result. A tangible result would do something with the data which has been

located, for example, would display or report or output the located file data to the

user.

Applicant argues "Nowhere does Miller et al indicate that the data

structures that contain the addressing information are stored in the

semiconductor memory which the file data is also stored". Examiner respectfully

disagrees. Miller teaches this at Abstract (operating system maintains a table

storing locations of pages) and col. 3, lines 58- col. 4, lines 17 (locating the file

on semiconductor memory with stored addresses). The operating system lives

in memory and memory is semiconductor memory. Therefore the information

used to locate the file data is stored in semiconductor memory.

Applicant argues with regard to claims 9, 19 that "the office action

"asserts it is inherent that operating system is stored in semiconductor

memory"" and "the inherent feature must exist in the reference". Examiner finds

Miller et al. teaches the operating system being executed by CPU which

maintains a table in memory as described in col. 6, lines 55-58. The operating

system lives in the memory. Memory is semiconductor memory. Therefore the

operating system is stored in semiconductor memory.

In response to applicant's argument that there is no suggestion to

combine the references, the examiner recognizes that obviousness can only be

established by combining or modifying the teachings of the prior art to produce

the claimed invention where there is some teaching, suggestion, or motivation

to do so found either in the references themselves or in the knowledge

generally available to one of ordinary skill in the art. See *In re Fine*, 837

F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21

USPQ2d 1941 (Fed. Cir. 1992). In this case, Miller et al. teaches the claimed

invention as discussed above and Miller et al. does not specifically teach a

header providing location information and length of the blocks. Garner does

teach this limitation: Specifically Garner teaches the header as shown in fig 2,

with a pointer to locate the file (col. 6, lines 1-5) and length (starting and ending

points which determine the size of the sector at col. 7, lines 6-9). It also

teaches the number of entries as described in col. 6, line 6. (revision number)

Therefore it would have been obvious for a person with ordinary skill in the art

at the time the invention was made to include a header and information on

length in the method of Miller et al. because it allows condition of the sectors to

be transferred thus aiding in determining error in data transfer.

Conclusion

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of

time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire

THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

9.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

        Kleiman et al (US 2001/0044807) teaches a method of file system image

transfer.

        Miller et al (US 5, 237,460) teaches a memory device stored on

semiconductor memory which stores a table for locating compressed data.

Contact Information

10.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Susan F. Rayyan whose telephone number is

571-272-1675. The examiner can normally be reached on M-F, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, John Cottingham can be reached on 571-272-7079. The

fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

SR

5/16/2007

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